

## **REMARKS**

### **1. Substitute Amendment**

This filing is in response to the Notice of Non-Compliant Amendment which issued on February 18, 2009. This filing is substantially identical to that filed on December 12, 2008, however, the claims, now properly numbered and identified as to status and having their complete text, replace those filed with that paper.

### **2. Status of the Claims**

Claims 2-3, 17-19, and 22-43 are pending. Claims 41-43 have been withdrawn.

New claims 45-47 have been added. These claims are limited to the elected species.

### **3. Election/Restriction**

The Examiner maintains the restriction of claims 41-43. The Examiner suggests that Applicant's arguments are unclear because "it is unclear if applicant is arguing that the species are obvious variants." (Office Action, page 2). Applicants submit that they are not arguing that the species are obvious variants.

That said, Applicant maintains that the Examiner still has no grounds to require an election of species because there is no serious burden on the Examiner to examine the indications described in claims 41-43. The Examiner has presumably already searched the group of disorders in claims 41-43. Thus, the requirement for making an election of species should be withdrawn.

Applicant acknowledges that this is a *species* election.

#### **4. Information Disclosure Statement**

Applicant filed an IDS with the Amendment dated December 12, 2008, containing a certified translation of passages 1-9 of the Watzl reference.

#### **5. Obviousness**

##### *5.1. Patentability of the Present Set of Claims Over Oliver (US-A-5,869,062),*

##### *EP-A-0 281 812 and De Paoli Ambrosi (US-A-6,147,054)*

From page 10, line 1 to page 14, line 7 of the Office Action, the Examiner alleges that claims 2, 5 to 11, 17 to 19, and 26 to 39 are obvious from Oliver in view of EP-A-0 281 812 (in the following referred to as EP 812) in further view of De Paoli as evidenced by the cited non-patent literature.

##### *5.1.1. Analysis of Oliver (US-A-5,869,062)*

Oliver describes a method for the treatment of skin acne comprising the step of applying a composition directly to the skin comprising: 25 to 60 wt.-% of a base, 8 to 20 wt.-% of calamine, 0.5 to 3 wt.-% of an anti-oxidant, and 0.25 to 4 wt.-% of an herbal anti-bacterial product (cf. claim 1). The herbal anti-bacterial product can be selected from the group consisting of golden seal extract, tea tree oil, Echinacea, garlic, pau d'arco and red clover (cf. claim 6).

Applicant submits that there is no disclosure in Oliver pointing to a combination of zinc oxide with an amino acid. Peroxide and zinc oxide, are optional components. (Oliver, col. 1, lines 48-49). Oliver also does not describe whether the peroxide is an inorganic peroxide or an organic peroxide. (See Oliver Table 3). Thus one of skill would not combine zinc oxide with either an inorganic peroxide or an amino acid with any expectation of success against cellulitis.

Furthermore, Oliver does not explicitly teach polyphenols or secondary plant substances. Oliver describes golden seal extract, tea tree oil, Echinacea, garlic and red clover as an anti-bacterial product. Beside golden seal extract, Oliver does not describe any details of the form in which these herbs are used. In particular, Oliver does not disclose in any way which components (parts) of said herbs are used, by which method and solvent an extract has been prepared or, particularly, the components contained in the used extracts. Applicant points out that none of the described components of the used golden seal extract is a secondary plant substance. Oliver only discloses that a liquid extract from leaves or bark of witch hazel is used. It does not describe any method for preparation of the used liquid extract nor any solvent used in this extract nor any details forming said liquid extract.

If the Examiner should still maintain her position that Oliver teaches a secondary plant substance in an amount of at least 2 wt.-%, Applicants ask the Examiner to clearly identify those passages of Oliver which teach the use of secondary plant substances or which point to a method of preparing an extract from which clearly follows that the resulting extract contains a secondary plant substance or which contains an indication pointing to other references such as the cited non-patent literature, which clearly confirms that the form of the herbs used in Oliver clearly contain at least 2 wt.-% of at least one secondary plant substance.

Thus, Applicants submit that Oliver does not teach the polyphenol (or secondary plant substance) or an amino acid. Moreover, Oliver would not be used to obtain the present invention because it requires an antioxidant, and one of skill would have no reason to use both zinc oxide and an inorganic peroxide, which are optional ingredients. Thus, Oliver would not be combined with any of the other references to obtain the present invention with any expectation of success.

#### *5.1.2. Analysis of EP-A-0 281 812 (EP 812) in combination with Oliver*

EP 812 describes a composition for the treatment of acne comprising a keratolytic agent, an astringent, and an anti-inflammatory agent (cf. claim 1). However, EP 812 would not be

combined with Oliver because EP 812 teaches that the composition of EP 812 should not be used with anti-biotics.

EP 812 teaches that three main components provide the desired effect, none of which are the keratolytic or comedolytic agent, astringent, and anti-inflammatory agent. (EP 812, column 3, line 54 to column 4, line 11; page 3, lines 20 to 27; column 3, lines 41 to 46). EP 812 states that “there is no need to use active ingredients having anti-bacterial characteristics.” (EP 812 page 3, lines 20 to 27). Thus, EP 812 clearly teaches that the components should not be combined with a composition having active ingredients with anti-bacterial characteristics. Since Oliver clearly teaches a composition comprising a herbal anti-bacterial product which is contrary to this teaching of EP 812, one of skill in the art would not have combined Oliver and EP ‘812 with.

Moreover, EP 812 teaches away from combining the invention with benzoyl peroxide because it the keratolytic agents are irritating chemicals which would not be combined with additional irritating chemicals like benzoyl peroxide. See EP 812, column 7, lines 53 to 57. If a person skilled in the art were to combine Oliver with EP 812 at all, there is no reason why one of skill in the art would use a peroxide in view of the expected disadvantages, and secondly to use particularly an inorganic peroxide. Thus, one of skill in the art would not combine Oliver and EP 812.

Moreover, EP 812 teaches against using an amino acid with a peroxide. EP 812 discloses benzoyl peroxide as a comedolytic agent. However, EP 812 teaches that the amino acid would not be sufficient with such a strong skin irritant. (EP 812 column 5, line 30 to column 6, line 8). EP 812 teaches the use of hydrocortisone or non-steroidal anti-inflammatory agents such as ibuprofen if the desired composition contains benzoyl peroxide. Oliver teaches the *optional* use of a peroxide. In view of this teaching of EP 812 one of skill in the art would not combine EP 812 with Oliver to obtain a composition containing a peroxide an amino acid.

Finally, EP 812 does not disclose any secondary plant substance, thus does not remedy the deficiency of Oliver.

In view of these reasons why one of skill would not look to EP 812 to provide either the peroxide or the amino acid, Applicants request that the rejection be withdrawn.

*5.1.3. De Paoli Ambrosi (US-A-6,147,054)*

The Examiner cites De Paoli to provide amino acids and polyphenols. De Paoli describes a composition for therapeutic, cosmetic, pharmaceutical or dietetic use comprising at least one compound selected from the individual compound acetylglucosamine and the individual compound glucuronic acid, and at least one substance selected from the group of monocarboxylic acids, dicarboxylic acids,  $\alpha$ -hydroxy acids,  $\alpha$ -hydroxy acids, plants and extracts thereof, flavonoids, bioflavonoids, isoflavonoids, saponines, terpenes, triterpenes, amino acids, water-soluble vitamins and lipo-soluble vitamins (cf. claim 1).

De Paoli discloses that the desired effects are achieved are a biological, physiological, chemical, physical, or pharmacological action by the acetylglucosamine and the glucosamine acid either alone or combined. (De Paoli, column 1, line 53 to column 2, line 44). This passage in particular indicates that the effect of De Paoli is based on the use of acetylglucosamine and glucuronic acid either alone or combined.

Additionally, there is no explicit disclosure of a combined use of amino acids in pure form with a polyphenol required by present claim 2. More particularly, there is no hint in De Paoli pointing to a combination of at least one amino acid in pure form and 2 to 50 percent by weight of a polyphenol. Applicant emphasizes that both "amino acids" and "terpenes, saponines and flavonoids" are members of an extensive list of the so-called synergists. Again, there is no suggestion to specifically combine at least one amino acid with a terpene, a saponine, a flavonoids or an isoflavonoid, nor to any advantages of such a combination.

Moreover, none of the examples of De Paoli contains a terpene, triterpene, saponine, isoflavonoid or flavonoid. Only Preparation Example 3 comprises proline. Thus, one of skill, in reviewing Oliver and EP 812 would not know which “synergistics” to choose, and based on the teachings of EP 812, would not have used both an amino acid and a benzoyl peroxide in the same composition. One of skill would also not look to Oliver to provide either a peroxide or zinc oxide. Thus, one of skill would not find the present invention obvious in light of Oliver, EP 182, and De Paoli.

3.4 *Hwang et al. (Antimicrobial constituents from golden seal (the Rhizomes of Hydrastis canadensis) against selected oral pathogens) Wikipedia-Echinacea; Wikipedia-Witch Hazel; and [www.globalherbalsupplies.com/herb\\_information/aloe\\_vera.htm](http://www.globalherbalsupplies.com/herb_information/aloe_vera.htm)*

In the outstanding Office Action the Examiner points to the above cited non-patent literature as evidence that the golden seal extract, and the extracts of tea tree oil, Echinacea, garlic and red clover used in Oliver contains at least one secondary plant substance.

Applicant submits that the Examiner’s reliance on the cited non-patent documents is improper. Excluding Hwang, the other cited non-patent documents are based on non-scientific sources. That is, it is uncertain whether its disclosure content is correct. Moreover, it is wholly improper to rely upon an *editable* resource, whose content may be modified by any person *at any time*. Thus, Applicant submits that the Wikipedia references and the promotional literature cannot be relied upon to maintain the obviousness rejection.

Additionally, the Examiner cites these references to show that the ingredients of Oliver, EP 812 and De Paolis *inherently* contain the claimed secondary plant substances in the claimed amounts. However, Applicant submits that to rely on an inherent characteristic of a prior art composition, the characteristic must necessarily and always be present in that composition. Applicant submits that these documents in combination with Oliver, EP 812 and De Paolis do not disclose sufficient information to establish that the claimed secondary plant substances (in particular polyphenols) are present in the required amounts.

Applicant submits that different varieties of the same plant, which part of the plant is used when preparing an extract, and the method of extract preparation are all important to determining the composition of the extract. (De Paoli, for example, indicates in column 4, line 29 that extracts can be obtained from roots, leaves, fruits, bark and flowering top.) Thus, Applicant submits that the Examiner's citations fail to establish that 2-50% polyphenols are present in the prior art.

Applicant also point out that an extract of a plant does not necessarily include a secondary plant substance in any recognizable amount. For example, olive oil is an extract of olive fruits and, depending on its preparation, essentially does not contain secondary plant substances. Furthermore, it should be emphasized that Oliver describes details of the golden seal extract in column 2, lines 40 to 47. According to the described details, the golden seal extract used in Oliver does not contain a secondary plant substance as required by present claim 2, particularly not 2 to 50 wt.-% of at least one secondary plant substance. That is, Oliver itself provides a clear evidence that the term "extract" does not automatically teach a composition comprising a secondary plant substance.

Turning to Hwang and the other non-patent references, Hwang describes that from roots of the specific plant *Hydrastis Canadensis* the described compounds have been isolated. However, it does not disclose any details of the used extract and the isolation methods. Therefore, it is impossible to allege that "usual" extracts contain the cited compounds.

Wikipedia-Echinacea clearly discloses on page 2, 1st paragraph that there are nine species of Echinacea. In the penultimate paragraph on page 2 this reference clearly discloses:

"As with any herbal preparation, individual doses may vary significantly in active chemical composition. In addition to pure process control which may affect inter- and intra-batch homogeneity, species, plant part, extraction method, and contamination and adulteration with other products all lead to a variability between products."

In the section entitled “Active Substances” on page 3 Wikipedia-Echinacea indicates that all species have chemical compounds called phenols. Phenols, however, does not necessarily mean “polyphenols” as required by present claim 2. Furthermore, this passage also confirms the above indication that different varieties contain different ingredients and/or different amounts thereof by indicating, e.g. that “other phenols include echinacoside, which is found in greater levels, within *E. angustifolia* and *E. pallida* roots than in other species” (cf. also last paragraph on page 3 of Wikipedia-Echinacea). Also the statement on page 4 of Wikipedia-Echinacea entitled “Species” clearly teaches that “The several species of Echinacea differ in their precise chemical constitution, and may provide variable dosages of any active ingredients”.

Wikipedia-Witch Hazel describes that witch hazel is an astringent. In the 2nd paragraph it clearly discloses that there are various distillates of witch hazel that are gentler than the “drugstore” witch hazel and contain alcohol. In the 1st paragraph of the section entitled “Uses” this reference discloses that tannin is a main constituent of the extract. In the next sentence, however, it discloses that witch hazel sold in drugstores and pharmacies typically contains no tannin. Therefore, the question arises which further ingredients are missing in such distilled witch hazel extracts. Additionally, page 2, last paragraph indicates that “This page was last modified on 17 April 2008, at 08:15”. Therefore, it is uncertain whether the information provided by this reference was already available at the date the present invention was made, and/or is correct.

The Examiner cites Global Herbal Supplies for amino acids. However, Global Herbal Supplies indicates with respect to aloe vera that there are over 500 species of aloe. On page 2 in the section entitled “Plant Constituents” this reference indicates that an aloe vera leaf contains more than 200 different constituents. Page 3, last line to page 4, line 2 indicates that there are three different products which can be used, namely aloe latex, which is a sticky residue left over after the liquid from cut aloe leaves has evaporated, aloe vera extract, which is made by pulverizing the whole leaves of the plant, and aloe juice and aloe gel which is made from the inner leaf. As indicated above, these three different forms of aloe should contain different amounts of the same ingredients and/or different ingredients.



For reasons of completeness, Applicant would also like to emphasize that references describing all ingredients of a plant in detail cannot be used as evidence indicating the ingredients of an extract used in Oliver. References describing all ingredients of plants are a summary of analytical data obtained by a multiplicity of different extracts of a plant or a specific part of a plant. The multiplicity of extracts comprises aqueous extracts (cold extracts, hot extracts, steam extracts), different alcoholic extracts, different extracts with hydrocarbon solvents, different extracts with polar organic solvents and the like. Since the kind of extracts used in Oliver is unknown such references cannot show any details of an extract used in Oliver.

## 2.5 Conclusion

As explained in detail above, neither Oliver nor EP 812 disclose the use of 2 to 50 wt.-% of at least one secondary plant substance selected from the list required by present claims 2 and 3. Furthermore, Oliver is silent with respect to amino acids and EP 812 teaches against the use of benzoyl peroxide and an amino acid. Moreover, there is nothing in both documents which points to a composition comprising at least one salt, at least one individual amino acid in pure form, zinc oxide and inorganic peroxide useful as a key for cell membranes. Therefore, a combination of these documents cannot make obvious the subject matter of the present invention. De Paoli does not remedy these deficiencies.

For these reasons, a combination of Oliver with EP 812 and De Paoli cannot make obvious the subject matter of the present invention. Thus, there is no motivation for a person skilled in the art to combine these references, particularly to pick out the missing components of a composition of Oliver accidentally disclosed in EP 812 or De Paoli. For the above reasons, inventive step of the subject matter of the present invention should be acknowledged.

*5.2. Patentability of Claims 2 to 11, 13, 17 to 19, and 22 to 39 over Oliver (US-A-5,869,062), Horrobin (US-A-5,145,686) and De Paoli Ambrosi (US-A-6,147,054)*

From page 14, line 8 to page 19, line 5 of the Office Action the Examiner alleges that claims 2 to 11, 13, 17 to 19, 22 to 39 are obvious from Oliver in view of Horrobin in further view of De Paoli. Furthermore, it is alleged that Hwang et al., Wikipedia-Echinacea, Wikipedia-Witch Hazel and Global Herbal Supplies provide evidence.

*5.2.1. Oliver (US-A-5,869,062)*

To avoid repetitions Applicant points to item 4.1.1 above. As indicated above, Oliver itself provides a clear evidence that an extract of a plant, namely golden seal extract, does not contain a secondary plant substance, particularly does not contain 2 to 50 wt.-% of at least one secondary plant substance selected from the list cited in present claim 2.

On page 15, lines 4 to 6 the Examiner alleges that witch hazel used in Oliver contains tannins which are polyphenols. It should be noted that in the non-patent reference Wikipedia-Witch Hazel cited by the Examiner itself, the 1st paragraph of the section entitled "Uses", last sentence clearly discloses that "distilled witch hazel sold in drugstores and pharmacies typically contains no tannin." (emphasis added). It should again be emphasized that Oliver does not describe any details of the liquid extract from witch hazel.

On page 15, 1st paragraph, last two sentences the Examiner indicates that in a composition of Oliver aloe vera may be included in an amount of 0.01 to 0.5 %. The allegation, however, that this aloe vera contains amino acids is not supported, since Oliver is silent with respect to any details of the used aloe vera. Oliver particularly does not contain any hint to Global Herbal Supplies cited by the Examiner as an alleged evidence. This reference already indicates in the general information that there are over 500 species of aloe. Since any information with respect to the used aloe vera species is missing in Oliver such an allegation can only be made in knowledge of the subject matter of the present application.

*5.2.2. Horrobin et al. (US-A-5,145,686)*

The Examiner uses Horrobin for teachings of amino acids and polyphenols. Horrobin claims a pharmaceutical composition for topical application which comprises (a) at least one physiologically acceptable lithium salt in an amount sufficient to provide about 8 wt.-% of lithium ions in said composition, and (b) about 3 wt.-% of evening primrose oil (cf. claim 1).

It is clear to a person skilled in the art that in a composition of Horrobin lysine may *optionally* be used. (Horrobin, Column 3, lines 57 to 59). This is confirmed by a multiplicity of examples the compositions of which do not include lysine (cf. Examples 1 to 11, 15, 16, 20 to 23 and 25). Horrobin also does not disclose a reason for adding lysine or any effects thereof. Furthermore, Horrobin does not suggest that lysine is an amino acid which could be replaced by another amino acid. Therefore, there is no motivation for a person skilled in the art to pick out the optional ingredient “lysine” from a composition of Horrobin and to add it to a composition of Oliver. If the Examiner disagrees, the Examiner is requested to clearly identify the passage in Horrobin which motivates a person skilled in the art to pick out lysine and to add it to a composition of Oliver in expectation of an improvement of a composition of Oliver.

One of skill in the art would not be motivated to combine Horrobin, teaching *optionally* including rutin, and Oliver based on the disclosure of Horrobin. First, one of skill would not think rutin is beneficial for anti-inflammatory activities because Horrobin only teaches the optional inclusion of rutin to prevent the bioconversion of E-series prostaglandins. (Horrobin Column 3, lines 1 to 11). Horrobin, however, does not provide any other information with respect to the use of rutin or other bioflavonoids. Thus, the Examiner’s statement that “Horrobin teaches the use of rutin for an anti-inflammatory affect (a flavonoid which is classified as a polyphenol)...” is not clearly correct. (Office Action, page 17 lines 3 and 4).

Second, Oliver does not use E-series prostaglandins, therefore one of skill in the art would not pick out an optional component of a composition of Horrobin and to add it to a composition of Oliver. As indicated above, Horrobin only indicates that the effect of rutin and other bioflavonoids is the blocking of bioconversion of E-series prostaglandins. No other effects are described in Horrobin. Particularly, there is no hint in Horrobin pointing to any effects of bioflavonoids for healing skin diseases. Therefore, there is no motivation for a person skilled in the art to use bioflavonoids in a composition of Oliver in order to improve any healing effects of it. There is no hint in Horrobin to particularly combine lysine with a bioflavonoid, either.

Furthermore, there is no motivation to pick out the *optional* components lysine and rutin from a composition of Horrobin and to add it to a composition of Oliver in which the optional peroxide has been specifically selected from an inorganic peroxide, in expectation of some improvement. For the above reasons, the subject matter of present claim 2 is not obvious for a person skilled in the art from a combination of Oliver with Horrobin. Applicant requests that the rejection be withdrawn.

In order to come to the subject matter of present claim 3, a multiplicity of selections theoretically are necessary in the teachings of Oliver and Horrobin. For example, in a composition of Oliver a peroxide, which is an optional ingredient, must be selected. Oliver discloses both, inorganic and organic peroxides. Specifically in a second selection an inorganic peroxide must be selected. In Horrobin, in addition to, for example, evening primrose oil, the optional ingredients rutin and lysine must be selected. Since no effect of lysine is described in Horrobin, as mentioned above, there is no motivation for a person skilled in the art to specifically select lysine. There is no hint to any other amino acids in Horrobin, either. There is no hint in Horrobin to use at least 2 wt.-% of at least one bioflavonoid. There is no information available for a person skilled in the art on whether a combination of bioflavonoids and lysine has any improving effects on skin disorders and is suitable to improve a composition of Oliver. There is also no indication available for one of ordinary skill in the art how the microcirculation of cells could be improved.

Particularly, a combination of both documents does not make available to a person skilled in the art the solution of the object of the present invention, namely a key for cell membranes, comprising a salt, an amino acid in pure form, zinc oxide and an inorganic peroxide, which allows a better infiltration of agents into the cell and a better distribution of agents in the cells. Therefore, a solution of the object of the present invention as provided by present claim 3 is not obvious to a person skilled in the art from a combination of Oliver with Horrobin.

*5.2.3. De Paoli Ambrosi (US-A-6,147,054)*

In order to avoid repetitions, Applicant directs the Examiner's attention to the arguments above. The above provided arguments are also relevant for a combination of Oliver with Horrobin and De Paoli.

*5.2.4. Hwang et al.; Wikipedia-Echinacea; Wikipedia-Witch Hazel; and Global Herbal Supplies*

The arguments provided above are relevant for a combination of Oliver with Horrobin and De Paoli. As discussed above, these non-patent references cannot provide any evidence in view of the fact that in Oliver essential information is missing and that none of the cited documents point to the cited non-patent literature. It should also again be emphasized that there is a multiplicity of methods of preparing extracts of plants, as indicated above, and that in view of the multiplicity of methods a multiplicity of different extracts are obtained. Since none of the cited references discloses details of the method used for preparing the used extracts, it seems to be impossible to deduce the presence of any secondary plant substances, particularly in an amount of at least 2 wt.-% from these documents.

*5.2.5. Conclusion*

In the above, it has been shown that Oliver cannot make obvious the subject matter of the present invention alone. A combination of Oliver with Horrobin cannot make obvious the subject matter of present claim 2, since in view of missing information in Horrobin with respect to lysine and bioflavonoids (in absence of E-series prostaglandins) there is no motivation for a person skilled in the art to specifically pick out these optional components from a composition of Horrobin and to add it to a composition of Oliver in expectation of some improvement. With

respect of present claim 3, a person skilled in the art would not make the multiplicity of selections in both Oliver and Horrobin in expectation of some improvement.

Moreover, there is not suggestion that Horrobin would be useful to increase microcirculation. Applicant points to Horrobin, column 3, line 60 to column 4, line 2, which would suggest to a person skilled in the art to administer the composition of Horrobin in a form which will aid the penetration of the other components of the composition to the affected cells. This may be achieved by additionally incorporating one or more high-molecular weight polysaccharides into the compositions, such as dextrans. That is, it seems that Horrobin provides an entirely different solution than that in the present invention.

As indicated above, there is no motivation for a person skilled in the art to specifically pick out amino acids and e.g. flavonoids from a composition of De Paoli and to add it to a composition of Oliver in expectation of some improvement, since essential information is missing in De Paoli which motivates a person skilled in the art to do so. Thus, one of skill would not find the present invention obvious from the disclosures of Oliver, Horrobin, De Paoli, and the other non-patent cited literature. Applicant requests that the rejection be withdrawn.

*5.3. Patentability of Claim 12 Over Murad (US-A-5,962,517), Horrobin (US-A-5,145,686) or EP-A-0 281 812 and De Paoli Ambrosi (US-A-6,147,054)*

From page 19, line 6 to page 20, line 8 of the Office Action the Examiner holds the view that the subject matter of present claim 12 is obvious from Murad in view of Oliver, in view of Horrobin or EP 812 and in view of De Paoli, as evidence by Hwang, Wikipedia-Echinacea, Wikipedia-Witch Hazel and Global Herbal Supplies, in further view of Burke et al.. (US-A-5,693,318).

An analysis of the disclosure content of Oliver, Horrobin, EP 812 and De Paoli has been provided in above. Furthermore, arguments have been provided why the subject matter of independent claims 2 and 3 to which claim 12 refers is not obvious from a combination of these documents. These arguments also relate to claim 12.

In the above cited section of the Office Action the Examiner did not provide any arguments with respect to Murad. Therefore, no further comments should be provided with respect to Murad. However, Applicant points to comments concerning Murad submitted with previous responses.

Burke et al. is directed to hair solutions. Burke et al. clearly teaches a person skilled in the art that particularly preferred peroxides are hydrogen peroxide and benzoyl peroxide. (Burke, column 5, lines 38 to 56). These peroxides are also cited in Oliver in column 3, 2nd paragraph. Neither zinc peroxide nor sodium peroxide is mentioned in Burke et al. as a preferred peroxide or a particularly preferred peroxide.

Applicant submits that it is not comprehensible why there should be any motivation for a person skilled in the art to replace a preferred peroxide or a particularly preferred peroxide by a not preferred peroxide as clearly disclosed in Burke et al. in expectation of any improvement. It is generally known that preferred embodiments provide better effects or advantages than non-preferred embodiments.

Furthermore, it is not comprehensible why “one would have been motivated to do so with the reasonable expectation of similar results” (cf. page 20, 1st paragraph of the Office Action) since there is nothing in Burke et al. which suggests any success in combining . There is also nothing in Burke et al. that the particularly preferred hydrogen peroxide and benzoyl peroxide is an equivalent component to zinc peroxide and sodium peroxide.

The Examiner also points to EP 812. EP 812 uses benzoyl peroxide which is also cited in Oliver and is a particularly preferred peroxide in Burke et al. It is not comprehensible why a person skilled in the art combining these references should have any motivation to replace benzoyl peroxide. Burke et al. does not suggest any advantage or improvement by using sodium peroxide or zinc peroxide. EP 812 teaches away from using benzoyl peroxide with amino acids.

From the above, thus a person skilled in the art reading Burke et al. would not substitute hydrogen peroxide or benzoyl peroxide cited in Oliver by sodium peroxide or zinc peroxide. If



the Examiner does not agree Applicant requests that the Examiner identify passages of Burke et al. which provide motivation for a person skilled in the art to use sodium peroxide or zinc peroxide and/or pointing to the alleged equivalence thereof.

*5.4. Patentability of Claim 40 in View of Oliver (US-A-5,869,062), Horrobin (US-A-5,145,686) or EP-A-0 281 812, De Paoli Ambrosi (US-A-6,147,054) and Squires (US-A-6,335,684)*

From page 20, line 9 to page 21, line 7 of the Office Action, the Examiner holds the view that claim 40 is not patentable in view of the above cited patents.

The Examiner relies on Squires to teach application of the composition to cellulitis. Squires describes a medial composition for use in treating diseases comprising aqueous benzalkonium chloride and Echinacea Purpurea wherein the antimicrobial isolates of Echinacea purpurea are selected from a list of a multiplicity of components (cf., e.g., claim 1).

Squires does not disclose which of the cited compounds could be secondary plant substances. Therefore, a selection of secondary plant substances out of the multiplicity of components cited in the list of isolates of Echinacea purea can only be made with knowledge of the subject matter of the present invention.

In the last paragraph of page 20 of the Office Action the Examiner alleges that “echinacoside” and “cichoric acid” are classified as polyphenols. According to the Examiner’s own Wikipedia reference, however, echinacoside is not classified as a polyphenol but as glycoside (cf. also structure at the end of column 7 of Squires). Polyphenols are aromatic compounds having two or more hydroxyl groups directly bound to the aromatic ring. The basic structure of echinacoside, however, is formed by glycoside units. The same is true with “cichoric acid” which is classified as derivative of tartaric acid and is designated as “2,3-O-dicaffeolytartaric acid” (cf. column 5, line 62 of Squires).

Applicant would also like to emphasize that similar to all other cited references, Squires is silent with respect to any effect on cell membranes. Therefore, the key for the cell membranes which is part of the compositions of claims 2 and 3, and the effects and advantages thereof, cannot be obvious from a combination of Squires with the other cited references. Therefore, claim 40 would not be obvious in light of Squires in combination with Oliver, Horrobin, and De Paoli. Therefore, Applicant requests that the obviousness rejection be withdrawn.

Conclusion


In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell Reg. No. 36,623 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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